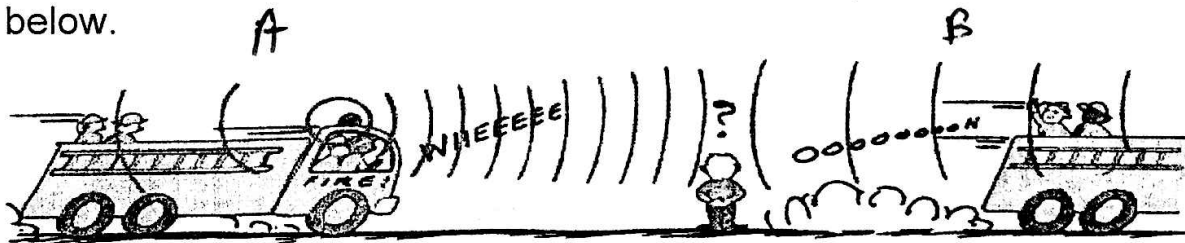


## Doppler Effect Worksheet

1. When an automobile moves towards a listener, the sound of its horn seems relatively  
a. low pitched      ☒ b. high pitched      c. normal
2. When the automobile moves away from the listener, its horn seems  
☒ a. low pitched      b. high pitched      c. normal
3. The changed pitch of the Doppler effect is due to changes in  
a. wave speed      ☒ b. wave frequency
4. Circle the letter of each statement about the Doppler Effect that is true.  
☒ a. It occurs when a wave source moves towards an observer.  
☒ b. It occurs when an observer moves towards a wave source.  
☒ c. It occurs when a wave source moves away from an observer.  
☒ d. It occurs when an observer moves away from a wave source.
5. True / ☒ False: A moving wave source does not affect the frequency of the wave encountered by the observer.
6. ☒ True / False: A higher frequency results when a wave source moves towards an observer.
7. Two fire trucks with sirens on speed towards and away from an observer as shown below.



- a) Which truck produces a higher than normal siren frequency? **A**
- b) Which truck produces a lower than normal siren frequency? **B**